PUBLIC COMMENT

Chris Wingert, General Manager
West Central Texas Municipal Water District
Abilene

Thank you for the opportunity to briefly comment before the meeting.

A couple of points to consider as you deliberate on the E-flow criteria:

1. **BEST recommendations for "High Flow Pulses" and "Overbank Events" may be somewhat high**. Mentioned this to you last meeting based on 21-day volume criteria.

   Recently I looked at the 15-minute USGS flow for Brazos River at South Bend during 2008 through 2011. Looking at the actual events passing that gauge during the last 4 years:

   - 1 Overbank flow every 2 years - 0 out of 4 years.
   - 1 Overbank flow every year - 1 out of 4 years.
   - 1 High Pulse every season - 2 out of 12 seasons.
   - 2 High Pulses every season - 2 out of 12 seasons.
   - 3 High Pulses every season - 3 out of 12 seasons.

   Again it appears the historic flows have been far less than the BBEST criteria for the Upper Brazos River Basin. As a result a new reservoir would have to release a large portion of inflows to meet the criteria, which at best would have a significant financial impact on the project and at worst make the project unfeasible.

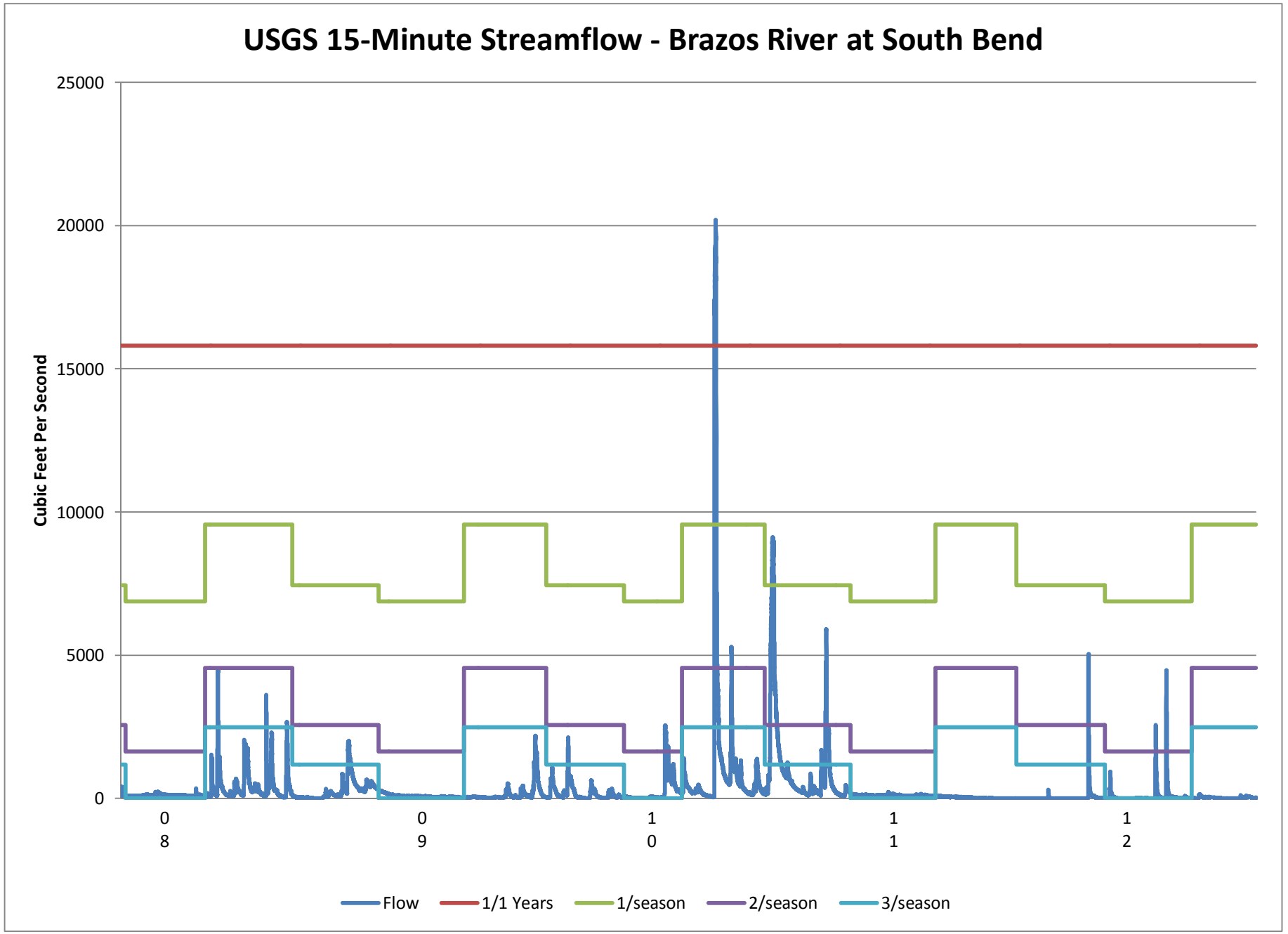
   I would encourage the Committee to consider reducing the BBEST recommended criteria to be more realistic with recent stream flow performance within the upper basin, and to be a manageable hardship on reservoir developers.

2. **The proposed Overbank and High Flow Pulse criteria will be difficult if not impossible to release from a structure.** For example, the Hubbard Creek Reservoir Dam is typical of how a new dam might be designed on the Brazos River. This dam features an outlet works 34 feet below the conservation level, 12 gates with a sill elevation 6.5 feet below conservation level, and an emergency spillway starting 11 feet above conservation level.

   The outlet works will pass relatively little water. The service spillway will pass much more, but would not pass any High Pulse or Overflow rate unless the reservoir level was at least 3 feet above conservation level.

   Dams are not typically designed to pass very high flow rates when the reservoir level is at or below conservation level. It would be extremely expensive to design and construct one that would pass such high flows at levels lower than the conservation level.

Thank you for your time. I would be happy to address any questions you may have.


USGS 15-Minute Streamflow - Brazos River at South Bend
Cubic Feet Per Second
25000
20000
15000
10000
5000
0
0 8
0 9
1 0
1 1
1 2
Flow
1/1 Years
1/season
2/season
3/season

H U B B A R D C R E E K R E S E R V O I R

Actual Release Rates versus the Environmental Flow Regime Recommendations from the Brazos River BBEST

for the Brazos River near South Bend Gauge

HUBBARD CREEK RESERVOIR			WINTER SEASON			SPRING SEASON					SUMMER SEASON				
			High Flow Pulse		Base	High Flow Pulse				Base	High Flow Pulse				Base
		Spillway	1x Season	2x Season	75th %tile	1x Season	2x Season	3x Season	4x Season	75th %tile	1x Season	2x Season	3x Season	4x Season	75th %tile
	Percent	Discharge	960	280	120	9,560	4,550	2,480	1,260	100	7,440	2,560	1,180	580	95
Elevation	Full	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)	(CFS)
1,195.0	165%	16,500	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1,190.0	137%	15,700	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1,185.0	108%	12,100	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1,183.0	**100%**	**424**	**--**	**Yes**	**Yes**	**--**	**--**	**--**	**--**	**Yes**	**--**	**--**	**--**	**--**	**Yes**
1,180.0	87%	410	--	Yes	Yes	--	--	--	--	Yes	--	--	--	--	Yes
1,176.5	73%	392	--	Yes	Yes	--	--	--	--	Yes	--	--	--	--	Yes
1,175.0	67%	384	--	Yes	Yes	--	--	--	--	Yes	--	--	--	--	Yes
1,170.0	50%	356	--	Yes	Yes	--	--	--	--	Yes	--	--	--	--	Yes
1,165.0	37%	326	--	Yes	Yes	--	--	--	--	Yes	--	--	--	--	Yes
1,160.0	26%	294	--	Yes	Yes	--	--	--	--	Yes	--	--	--	--	Yes
1,155.0	18%	257	--	--	Yes	--	--	--	--	Yes	--	--	--	--	Yes
1,150.0	12%	215	--	--	Yes	--	--	--	--	Yes	--	--	--	--	Yes
1,145.0	7%	108	--	--	--	--	--	--	--	Yes	--	--	--	--	Yes
1,140.0	4%	0	--	--	--	--	--	--	--	--	--	--	--	--	--
1,135.0	2%	0	--	--	--	--	--	--	--	--	--	--	--	--	--
1,130.0	1%	0	--	--	--	--	--	--	--	--	--	--	--	--	--
1,125.0	0%	0	--	--	--	--	--	--	--	--	--	--	--	--	--
1,120.0	0%	0	--	--	--	--	--	--	--	--	--	--	--	--	--
1,115.0	0%	0	--	--	--	--	--	--	--	--	--	--	--	--	--
1,113.0	0%	0	--	--	--	--	--	--	--	--	--	--	--	--	--